

## ABSTRACT

Water-based, substrate treatment compositions contain (A) at least one chitosan selected from chitosan and a chitosan derivative, and (B) a metal compound containing at least one metal selected from Ti, Zr, Hf, Mo, W, Se, Ce, Fe, Cu, Zn, V and trivalent Cr. In particular, the water-based, substrate treatment compositions can improve the interlayer adhesion between metal materials and resin coating layers such as films or coatings, and can also improve the corrosion resistance and solvent resistance of such metal materials.